

Claim 6 has been amended as follows:

6. (Amended) An optical scanning system for a scanning beam imager or display, for a scanning beam imager or display, comprising:

- an input port positioned to accept an input light beam;
- at least one deflector aligned to receive the input light beam from the input port and oriented to redirect the received light beam through a selected periodic scan pattern having a plurality of scan lines within a period, the deflector being of a type that produces a predicted deviation of the redirected light beam from a desired light beam at respective locations in the selected scan pattern;
- an electrical control circuit operative to produce a control signal corresponding to the selected scan pattern; and
- a controllable optical element positioned to receive either of the input light beam or the redirected light beam and having an input terminal for receiving the control signal, the optical element being responsive to the control signal to produce a corresponding correction that offsets the predicted deviation, wherein the controllable optical element includes a deformable membrane responsive to the control signal to deform within a selected one of the scan lines to produce the corresponding correction.

Claim 7 has been amended as follows:

7. (Amended) The optical scanning system of claim 6 wherein the deformable membrane is a microelectromechanical (MEMS) device.

Please cancel claim 9.

Claim 10 has been amended as follows:

- C3
10. (Amended) An optical scanning system comprising:
- an input port positioned to accept an input light beam;
 - at least one deflector aligned to receive the input light beam from the input port and oriented to redirect the received light beam through a selected periodic scan pattern having a plurality of scan lines, the deflector being of a type that produces a predicted deviation of the redirected light beam from a desired light beam at respective locations in the selected scan pattern;
 - an electrical control circuit operative to produce a control signal corresponding to the selected scan pattern;
 - a controllable optical element positioned to receive either of the input light beam or the redirected light beam and having an input terminal for receiving the control signal, the optical element being responsive to the control signal to produce a corresponding correction that offsets the predicted deviation within selected ones of the scan lines wherein the predicted deviation is a phase front distortion and wherein the corresponding distortion correction is an offsetting phase front distortion; and
- wherein the controllable optical element is a deformable membrane.

Claim 13 has been amended as follows:

- C4
13. (Amended) The imaging apparatus of claim 12 wherein the wavefront corrector includes a microelectromechanical (MEMS) device.

Claim 16 has been amended as follows:

16. (Amended) A scanning system for scanning through a substantially raster pattern having a scanning period and a plurality of scan lines, comprising:

a light source that emits a beam of light along a beam path;

a scanning mirror positioned in the beam path, the scanning mirror pivoting through a predetermined angular range to redirect the beam of light through selected lines in the substantially raster pattern; and

an active optical element oriented to receive the beam of light and direct the received beam of light along the beam path to the scanning mirror, the optical element being operative to pre-distort the beam of light in a periodic manner corresponding to the orientation of the scanning mirror in the predetermined angular range.

[Please amend claim 17 as follows:]

17. (Amended) The scanning system of claim 16 wherein the active optical element includes a microelectromechanical (MEMS) device.

Claim 21 has been amended as follows:

21. (Amended) A scanning module, comprising:

a microelectromechanical (MEMS) scanning mirror that moves through a predetermined scan path at a selected scan rate having a scanning period; and

a MEMS membrane aligned to the MEMS scanning mirror, the membrane being deformable through a desired deformation range and having a response time